

## **Soil and Water Remediation, Groundwater/Vadose Zone (RL-0030)**

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*Media Presentation*

## Overview

This section addresses Project Baseline Summary (PBS) RL-0030, *Soil and Water Remediation Groundwater/Vadose Zone*.

NOTE: Unless otherwise noted, all information contained herein is as of the end of April 2006.

## Notable Accomplishments

**Well Drilling:** To date, eleven Calendar Year(CY) 2006 wells and six CY 2007 wells are complete. Seven Tri-Party Agreement (TPA) wells are in progress. Eight wells are in planning for late spring/summer drilling. Non-TPA drilling activities made significant progress. The planning for four wells that will be used in a new pump-and-treat system for chromium that has recently reached the Columbia River in the 100-K Area was completed, and a request for bids developed. Finally, the planning for two wells that will be drilled in the 100-H Area to evaluate bioremediation technologies for cleaning up chromium was initiated.

**Cleaning up Chromium Along the River:** Excellent progress has been made towards meeting the remedial action objective (RAO) of 20 parts per billion (ppb) for the extraction and compliance wells in the 100-H Area. On April 25, 2006, all compliance wells and extraction wells were below 20 ppb. There will be continued monitoring of the chromium concentrations in the wells. In the 100-K Area, RL received EPA's approval in March to proceed with a new chromium pump-and-treat system near the KW Reactor under the existing Record of Decision. A contract was awarded for construction of the pump-and-treat building. The contract for the treatment skid that will go into the building is scheduled for award in early May. A 10 to 14 week delivery is anticipated for the skid.

**Decommissioning Old, Unused Wells:** A contract was awarded in March to decommission sixty-four wells using mechanical casing perforation techniques. Work started the second week in April and nineteen of the wells had been completed by the end of April. One well has been removed from the contract because it was found to have a kink, or bend, in the casing that prevented the mechanical perforating equipment from being inserted down the well.

**Contamination in Groundwater:** The Groundwater Remediation Project received comments from its Peer Review Committee on the four EM-21 proposals addressing chromium at 100-D Area. The following is a summary of comments and actions:

- Augmentation of the in-situ redox manipulation barrier using micron-sized iron and shear-thinning fluid was approved with minor comments.
- Testing the use of electrocoagulation to treat chromium in the groundwater was approved with minor comments.
- Using calcium polysulfide as an in situ/ex situ treatment for chromium in the groundwater was not approved as written. The major comment was that this method was "too big a gun" for the contamination.
- Finding the chromium source using geophysics and drilling was not endorsed.

## FY 2006 Funds vs. Spend Forecast (\$M)

	Projected FY 2006 Funding	FY 2006 Fiscal Year Spend Forecast	Variance
Soil & Water Remediation, Groundwater/Vadose Zone	\$ 48.0	\$ 48.2	\$ -0.2

## FY 2006 Schedule/Cost Performance (\$M)

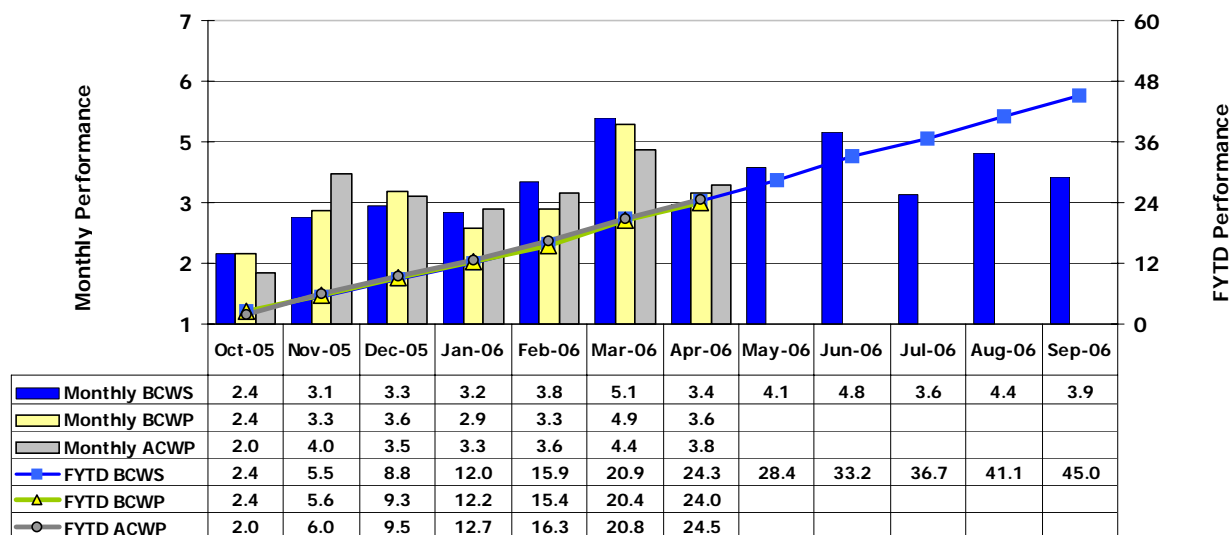
	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance \$	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion
Soil & Water Remediation, Groundwater/ Vadose Zone	\$24.3	\$24.0	\$24.5	-\$0.3	-1.4%	-\$0.6	-2.4%	\$45.0

Numbers are rounded to the nearest \$0.1M and include the Closure Services allocation.

**Schedule Performance (-\$0.3M/-1.4%).** Variance within threshold; no explanation required.

**Cost Performance (-\$0.6M/-2.4%).** Variance within threshold; no explanation required.

### Performance Analysis FYTD and Monthly (\$M)



## Milestone Achievement

PBS	MSN	Title	Type	Due Date	Actual Date	Forecast Date	Status / Comments
RL-030	M-24-57G	Install a Cumulative of 45 Wells by December 31/ 2005	RL	12/31/05	08/16/05		Complete
RL-030	M-24-57J	Install a Cumulative of 60 Wells by December 31/ 2006	RL	12/31/06	05/11/06		Complete
RL-030	M-15-48A	Submit Draft A 200-ZP-1 CERCLA Remedial Investigation Report to EPA	RL	05/31/06		05/31/06	On Schedule